

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A flow control method for Virtual Container (VC)-Trunks in metropolitan-area network equipment, ~~comprising the following steps:~~

~~A) determining, by a receiving-end equipment, whether a service data packet block existing there is congestion at a VC-Trunk of a the receiving-end transmission equipment, if so there is congestion at the VC-Trunk, sending out a flow control packet with a VC-Trunk tag of the VC-Trunk to a transmission-end equipment;~~

~~B) pausing, by the transmission-end equipment, a service transmission of the VC-Trunk according to the VC-Trunk tag in the flow control packet, pausing service data packets of the VC-Trunk forwarding at a transmission equipment that has received said flow control packet, until timing brought in by the flow control packet expires and no other new flow control packet is received.~~

2. (Currently Amended) The flow control method according to Claim 1, further comprising: wherein step (B) after pausing the service transmission of the VC-Trunk further comprising, initiating, by the transmission-end equipment, a flow control timer at the transmission-end equipment that has received said flow control packet; determining whether said flow control timing is ended, if it is not the flow control timer expires and no new flow control packet is received, then waiting resuming, by the transmission-end equipment, the service transmission of the VC-Trunk.

3. (Currently Amended)_The flow control method according to Claim 1, ~~further comprising: wherein step (A) further comprising~~ after sending the flow control packet with the VC-Trunk tag to the transmission-end equipment, initiating, by the receiving-end equipment, a flow control timer at the receiving-end transmission equipment and sending said the flow control packet in a timing-timely manner until said the service data packet block congestion is disappeareddisappears.

4. (Currently Amended)_The flow control method according to Claim 1, wherein ~~step (A)the determining whether there is congestion at the VC-Trunk of the receiving-end equipment comprisingcomprises, on the downlink of the service data packets, calculating, by the receiving-end equipment, individually the number of the received service data packets received at the of every VC-Trunk at receiving-end transmission equipment; and determining that there is congestion at the VC-Trunk if the whether said number is excess exceeds a preset flow control threshold, if it is, sending the flow control packet to sending-end transmission equipment.~~

5. (Currently Amended)_The flow control method according to Claim 1, wherein ~~step (A)the determining whether there is congestion at the VC-Trunk of the receiving-end equipment comprisingcomprises, on the uplink of the service data packets, determining, by the receiving-end equipment, whether a First In First Out (FIFO) buffer of a the VC-Trunk at the receiving-end transmission equipment is overflow, and determining that there is congestion at the VC-Trunk if the FIFO buffer is overflow it is, sending said flow control packet to the receiving-end transmission equipment physical port.~~

6. (Currently Amended)_The flow control method according to Claim 1, wherein the flow control packet comprises an 802.3x pause frame and the VC-Trunk tag as a frame header is added to the 802.3x standard pause frame to consist the flow control packet.

7. (Currently Amended)_The flow control method according to Claim 1, wherein VC-Trunk tags correspond to VC-Trunks one by one, and the a length of the VC-Trunk tag length is determined by the number of VC-Trunks.

8. (New) A receiving-end apparatus for flow control of Virtual Container (VC) Trunks, comprising:

a first unit, configured for determining whether there is congestion at a VC-Trunk of the receiving-end apparatus, and sending out a flow control packet with a VC-Trunk tag of the VC-Trunk if there is congestion at the VC-Trunk.

9. (New) The receiving-end apparatus according to claim 8, wherein the first unit is further configured for resuming a service receiving after a time indicated by the flow control packet expires.

10. (New) The receiving-end apparatus according to claim 8, further comprising:

a second unit, configured for initiating a flow control timer; and

the first unit is further configured for sending the flow control packet in a timely manner until the congestion disappears.

11. (New) The receiving-end apparatus according to claim 8, wherein the first unit comprises a first module configured for calculating the number of service data packets received at the VC-Trunk; and determining that there is congestion at the VC-Trunk if the number exceeds a preset flow control threshold.

12. (New) The receiving-end apparatus according to claim 8, wherein the first unit comprises a second module configured for determining whether a First In First Out (FIFO) buffer of the VC-Trunk is overflow, and determining that there is congestion at the VC-Trunk if the FIFO buffer is overflow.

13. (New) A transmission-end apparatus for flow control of Virtual Container (VC) Trunks, comprising:

a first unit configured for pausing service transmission of the VC-Trunk according to a VC-Trunk tag received in a flow control packet.

14. (New) The transmission-end apparatus according to claim 13, further comprising:

a second unit configured for initiating a flow control timer after pausing the service transmission of the VC-Trunk, and resuming the service transmission of the VC-Trunk if the flow control timer expires and no new flow control packet is received.

15. (New) A system for flow control of Virtual Container (VC) Trunks, comprising:

a receiving-end apparatus configured for determining whether there is congestion at a VC-Trunk of the receiving-end apparatus, and sending out a flow control packet with a VC-Trunk tag of the VC-Trunk if there is congestion at the VC-Trunk; and

a transmission-end apparatus configured for pausing a service transmission of the VC-Trunk according to the VC-Trunk tag received in the flow control packet.

16. (New) The system of claim 15, wherein the receiving-end apparatus is further configured for initiating a flow control timer, and sending the flow control packet to the transmission-end apparatus in a timely manner until the congestion disappears.

17. (New) The system of claim 15, wherein the transmission-end apparatus is further configured for initiating a flow control timer after pausing the service transmission of the VC-Trunk, and resuming the service transmission of the VC-Trunk if the flow control timer expires and no new flow control packet is received.